

Re: Chuitna Coal Project - Iron review scope of work

Nakanishi,

William Beckwith

to: Allan S (DEC) 08/06/2010 03:32 PM

"Nakanishi, Allan S (DEC)",

Cc: "Powell, James E (DEC)",
"McGee, William D (DEC)"

Hello Allen - I think your attachement/Draft scope of work captures the general objective. Below are specific questions I suggest including. Thanks for the opportunity to review. Please contact me if you have questions.

Thanks - Bill

- ► Are the iron, macroinvertebrate, and fish data and the methods they are based on appropriate for the iron site-specific criteria analysis, and <u>if</u> <u>so</u>, were the data appropriately used?
 - Are the temporal and spatial relationships between the iron data and the macroinvertebrate data, and the iron data and the fish data, respectively, adequate for the analysis, i.e., are the data adequately "paired?"
 - Are the data of acceptable quality?
 - Are the analytical detection and quantitation limits for iron adequately sensitive?
 - Are the biological metrics used adequately sensitive? For example, is "percent salmonids" a sensitive metric if the fish numbers for the waters in question are expected to be dominated by salmonids regardless of abundance?
 - Where appropriate thresholds used for each metric to distinguish between biological conditions in attainment of ADEC's designated aquatic life uses and non-attainment?
 - Were the mean iron concentrations calculated using appropriate averaging periods (e.g. annual means where used vs., for example, means of data collected prior to or on the date of biological data collection)?
 - Are the statistical methods used appropriate for this analysis and were the statistics appropriately applied?
- ▶ Do the data support the conclusions?
 - Does the analysis support a conclusion that the biology would be supported, at a condition attaining ADEC's designated aquatic life uses, at the maximum iron concentrations, vs. the mean concentrations, given that the data do not reflect continued exposure of the biology to the maximums?

- Given that iron concentrations varied from site to site, by more than two fold for the means, is it appropriate to conclude that the highest means would be protective at all sites throughout the basin?

"Nakanishi, Allan S (DEC)"

08/02/2010 03:05:18 PM

From: "Nakanishi, Allan S (DEC)" <allan.nakanishi@alaska.gov>

To: William Beckwith/R10/USEPA/US@EPA

Cc: "Powell, James E (DEC)" <jim.powell@alaska.gov>, "McGee,

William D (DEC)" <william.mcgee@alaska.gov>, "Nakanishi,

Allan S (DEC)" <allan.nakanishi@alaska.gov>

Date: 08/02/2010 03:05 PM

Subject: Chuitna Coal Project - Iron review scope of work

Bill,

We're proposing to get a Phyllis Weber Scannell, a former AK Dept. of Fish & Game (ADFG) specialist who is now under contract with ADFG, to provide a technical review and evaluation of the report titled "Development of a Site-Specific Iron Water Quality Criterion for the Chuit River Drainage, Alaska", Tetra Tech Inc, March 25, 2010.

We'd appreciate any input you may have on the draft scope of work as we move forward to arranging this contract.

Your timely response is appreciated!

Regards,

Allan S. Nakanishi, P.E.

Dept. of Environmental Conservation Wastewater Discharge Authorization Program Engineering/Mining Technical Services 555 Cordova Street Anchorage, Alaska 99501 907.269.4028

From: McGee, William D (DEC)

Sent: Thursday, July 29, 2010 11:39 AM

To: Nakanishi, Allan S (DEC)

Subject: Iron review scope of work

Here is a start on a scope of work. I would suggest that Bill Beckwith provide some comments on this.

Thanks



 $\ensuremath{\text{Pete}}$ Iron review scope of work.docx